United States Court of Appeals
for the
District of Columbia Circuit

TRANSCRIPT OF RECORD

622

BRIEF FOR THE COMMISSIONER OF PATENTS

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA

Appeal No. 22,900

INTERNATIONAL SALT COMPANY, PLAINTIFF-APPELLEE

v.

COMMISSIONER OF PATENTS, DEFENDANT-APPELLANT

Appeal No. 22,902

INTERNATIONAL SALT COMPANY,
PLAINTIFF-CROSS APPELLANT

v.

COMMISSIONER OF PATENTS
DEFENDANT-CROSS APPELLEE

Appeals from the United States District Court
for the District of Columbia

BRIEF FOR THE COMMISSIONER OF PATENTS

S. WM. COCHRAN, *Acting Solicitor*
United States Patent Office

JACK E. ARMORE,
Of Counsel

United States Court of Appeals
for the District of Columbia Circuit

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Nathan J. Paulson

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United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA

Appeal No. 22,900 *

INTERNATIONAL SALT COMPANY, PLAINTIFF-APPELLEE
v.
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Appeal No. 22,902 *

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PLAINTIFF-CROSS APPELLANT
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DEFENDANT-CROSS APPELLEE

Appeals from the United States District Court for the District of Columbia

DEFENDANT'S BRIEF (FOR COMMISSIONER OF PATENTS)

STATEMENT OF ISSUES IN THE CONSOLIDATED APPEALS

1. Although the District Court properly held "that the plaintiff is not entitled to the patent on claim 4

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* This case has been before the Court under Appeal No. 22,151, International Salt Company v. Commissioner of Patents.

which broadly claims the alleged invention", did that Court err in holding that "a different consideration is applicable to claims 5 and 6" because those two claims also "specify the rate of rapid flow which the inventor considers his invention"—since there is no evidence that the specified flow rate has any critical significance and the evidence in fact shows the contrary?

2. Although the District Court properly found in effect that the claims are drawn to a combination of old elements (Findings 10 and 11 and Opinion of Nov. 21, 1968) (Appendix-217), did that Court err in holding that claims 5 and 6 are patentable—since there is no finding or evidence of an unexpected result or of unobviousness?

3. Did the District Court err in holding in effect that claims 5 and 6 are patentable because they are drawn to an upward flow at a specified rate of rapid flow (Opinion of Nov. 21, 1968) (Appendix-203)—since those claims do not call for an upward flow but are broad enough to encompass, for example, a downward flow or a horizontal flow?

4. Did the District Court manifestly err, as a matter of law, in failing to hold that claims 5 and 6 are unpatentable over the prior art?

5. Although the District Court properly dismissed the complaint of the plaintiff below as to claim 4 (Judgment of Jan. 6, 1969) (Appendix-220), did that Court err as a matter of law in doing so "without prejudice"?

6. In view of the plaintiff's cross-appeal (Appeal No. 22,902) from the District Court's dismissal of

his complaint as to claim 4, was the finding by that Court that claim 4 is drawn to an unpatentable combination of old elements (Findings 10 and 11 and Opinion of Nov. 21, 1968) (Appendix-203 and 217) so clearly erroneous as to justify or warrant independent review by this Court in view of Rule 52(a) of the Federal Rules of Civil Procedure and its prior adjudications in this field?

Introduction

These are appeals from the order (Appendix-220) of the United States District for the District of Columbia, dated January 8, 1969, in which the defendant Commissioner of Patents was authorized to issue a patent to the plaintiff International Salt Company containing claims 5 and 6 of patent application Serial No. 261,929, filed by Dale W. Kaufmann on February 11, 1963, entitled "Fractional Dissolution Method"; and wherein the complaint as to claim 4 of that application was dismissed "without prejudice" (the complaint was also dismissed as to claims 2, 3, 7 and 8 of the application). The Notice of Appeal was timely filed by the Commissioner of Patents on February 19, 1969 (Appeal No. 22,900) and the International Salt Company filed a Notice of Cross-Appeal on February 28, 1969 (Appeal No. 22,902) from the District Court's dismissal of his complaint as to claim 4. The International Salt Company filed a Motion to Consolidate Appeals on April 18, 1969, to which there was no objection by the Commissioner of Patents, and which was granted on April 30, 1969.

This action was instituted by a complaint filed by plaintiff under the provisions of 66 Stat. 803, Title 35 U.S.C., Section 145. The Court has jurisdiction with respect to appeals from final orders of the District Court by virtue of 62 Stat. 869, Title 28 U.S.C., Section 1261.

In view of the cross-appeal and Rule 28(h) FRAP, the parties will be referred to as defendant (Commissioner of Patents) and plaintiff (International Salt Company).

History of the Case

The complaint (Appendix-4) sought to have the District Court authorize the issuance of a patent containing claims 2 through 8 inclusive in patent application Serial No. 261,929. The case came on for a first trial on January 24, 1968; at that time, plaintiff withdrew the four claims 2, 3, 6 and 7 from suit, thus leaving claims 4, 5 and 8 at issue before the District Court. In an opinion on January 24, 1968 (Appendix-83), the District Court agreed with the conclusion of the Patent Office tribunals that the claimed process was obvious from the prior art (Finding 13) (Appendix-94), and dismissed the complaint on March 8, 1968 (Appendix-95).

The plaintiff appealed to this Court on May 7, 1968 (Appeal No. 22,151). On May 6, 1968, plaintiff filed "Plaintiff's Motion For Relief Under Rule 60(a) And 60(b) or Alternatively Rule 59(d), Federal Rules of Civil Procedure" requesting that the judgment of March 8, 1968 be vacated and asking for a new trial or that the trial be reopened. Defendant filed an opposition to plaintiff's motion. Plaintiff also filed on May 16, 1968 a motion under Rule 73, Federal Rules of Civil Procedure, to suspend the time for taking further action on the appeal, which was granted by the District Court in an order dated May 20, 1968. After a hearing on plaintiff's motion under Rules 59 and 60, the District Court reopened the trial by an Order dated June 6, 1968 (Appendix-97).

In an Order dated August 28, 1968, this Court remanded the case (Appeal No. 22,151) to the District Court "for a hearing on additional evidence pursuant to the [District Court] order of June 6, 1968". A second trial was held November 20 and 21, 1968, during which the plaintiff introduced additional evidence. The plaintiff also stated that it was then withdrawing claims 2, 3, 7 and 8 from suit, thus leaving claims 4, 5 and 6 at issue (Appendix-177).

In the opinion of November 21, 1968, at the conclusion of the second trial (Appendix-206), the District Court held that claim 4 is drawn to an unpatentable combination of old elements but that claims 5 and 6, drawn similarly to a combination of old elements, are patentable because they "specify the rate of the rapid flow." As indicated above, the District Court Judgment of January 8, 1969, authorized the issuance of a patent on claims 5 and 6 but dismissed the complaint as to claim 4 "without prejudice." Also, as previously indicated, the defendant below filed a Notice of Appeal on February 19, 1969 (Appeal No. 22,900), and the plaintiff filed a Notice of Cross-Appeal on February 28, 1969 (Appeal No. 22,902) from the District Court's dismissal of his complaint as to claim 4.

Plaintiff's Application

The specification of the application at bar (P. Ex. 1) (Appendix-228) relates to a continuous process "for preparing relatively pure sodium chloride brine from a contaminated supply material such as run-of-mine rock salt" containing, as the major impurity, relatively insoluble calcium sulfate (also known as mineral anhydrite). The process is directed in large part to removing the calcium sulfate from the brine so that the dissolved calcium sulfate does not exceed about 1.0 gram per liter in the saturated brine product. This is accomplished (in a 2-step process) by rapidly passing the solvent liquid (water) through a mass of granular raw salt in a dissolving chamber (whereby the sodium chloride goes into solution and the calcium sulfate is largely entrained or carried along in the flowing brine), then quickly "separating any still undissolved calcium sulfate from contact with the brine as it is withdrawn" from the dissolving chamber (page 3) (Appendix-230), "In this fashion, the calcium sulfate which dissolves more slowly than does the sodium chloride, is minimized in its contact with the brine". A typical flow rate, which should permit solution of the sodium chloride but forestall any substantial dissolving of the calcium sulfate, is about twelve gallons per minute per square foot of cross-sectional area of the dissolving chamber; a flow rate of at least ten gallons per minute per square foot is desirable (page 5) (Appendix-232). According to the application, the separator is of any desired type and may be a centrifugal separator such as the one disclosed in U.S. Patent No. 2,364,799 to

Laughlin et al (page 5) (Appendix-232). Describing "an apparatus operable in accord with the method of the present invention" (page 4) (Appendix-231), reference is made to the "liquid upflow" provided by the arrangement of that apparatus (pages 4 and 5) (Appendix-231 and 232).

The Claims

Claim 5, depending from withdrawn claim 2, and claim 6 are in issue in defendant's Appeal No. 22,900. Claim 4 has been placed in issue by plaintiff's Cross-Appeal No. 22,902. (The claims appear in the Examiner's Answer; Appendix-353)

All claims are drawn to the process described above for continuously producing, at a high flow rate with no shut down time, substantially pure sodium chloride brine from a salt source containing calcium sulfate generally comprising establishing a mass of source salt, continuously introducing solvent at one end of the mass at a flow rate sufficient to entrain and carry along a substantial or major portion of undissolved calcium sulfate released from the source and substantially just obtain a sodium chloride saturated brine at the other end of the mass, continuously withdrawing the brine with entrained calcium sulfate at the other end of the mass, and substantially immediately continuously separating the entrained undissolved calcium sulfate from the brine.

Whereas claim 4 in effect calls for an upward flow of the solvent, claims 5 and 6 do not call for an upward flow but are broad enough to encompass, for example, a downward or horizontal flow. Claim 4 does not recite any specific rate of flow or call for centrifugal separation. Claims 5 and 6 call for a flow rate "in the order of" (claim 5) or "in the order of at least" (Claim 6) ten gallons per minute per square foot of cross-sectional area of the flow path, and also for centrifugal separation.

The Prior Art

The prior art relied upon by defendant as negativing patentability is:

> The patent to Courthope et al., No. 2,734,804, granted February 14, 1956. (Def. Ex. 1A) (Appendix-250).
>
> The patent to Laughlin et al., No. 2,364,799, granted December 12, 1944. (Def. Ex. 1B) (Appendix-245).
>
> The patent to Miller, No. 3,168,379, granted February 2, 1965, filed Dec. 27, 1957. (P. Ex. 4) (Appendix-255). The patent is described as a continuation-in-part of previously filed application Serial No. 426,739, filed April 30, 1954, now abandoned. (Def. Ex. 2) (Appendix-368).

The patent to Courthope et al. (Def. Ex. 1A) (Appendix-250), principally directed to a salt dissolving apparatus, discloses (in the operation of that apparatus) a continuous process for producing a substantially pure sodium chloride brine from a salt source having calcium sulfate as the major impurity comprising passing the solvent (water) unidirectionally upwardly through a mass of granular raw salt in a dissolving chamber at a flow rate whereby the sodium chloride goes into the solution and impurities including calcium sulfate are entrained or carried along in the upwardly flowing brine; then the entrained impurities including calcium sulfate are separated from the brine "as quickly as possible" after withdrawal from the dissolving chamber, first in a settling chamber and then in a filtration chamber. The patentees notably state that "The rate of leaching [dissolving] of the calcium sulfate in the dissolution water or brine is of course a function of the length of time of contact and of the speed of dissolution liquid flow as well as the degree of concentration of the sulfate particles in the salt bed" (Appendix-251) (column 1, lines 50 to 54). They further state that calcium sulfate is more soluble in the more saturated brine and that it is, therefore, "essential to remove the anhydrite [calcium sulfate] particles away from contact with the dissolution water or brine as quickly as possible" (Appendix-251) (column 1, lines 56 to 64), (Appendix-253) (column 6, lines 10 to 18).

The patent to Laughlin et al. (Def. Ex. 1B) (Appendix-245), referred to in the application at bar for that very teaching, discloses a centrifugal separator which is capable of rapid and continuous separation of solid particles dispersed in a liquid. The patent indicates that the centrifugal separator disclosed therein may be used in place of settling tanks where high velocity separation is desired (Appendix-247) (paragraph bridging both columns on page 2).

The patent to Miller (P. Ex. 4) (Appendix-255) discloses a process for producing pure brine from rock salt containing calcium sulfate as a major impurity comprising passing the solvent (water) at "very high solution velocities" downwardly through a bed of salt crystals whereby the calcium sulfate particles are released and "then carried completely through the salt bed [entrained in the brine] before their separation from the brine solution", followed by "immediate separation" of the calcium sulfate particles from the brine. The patentee states (Appendix-256) (column 1, last full paragraph):

> As a consequence, there is no build up of calcium sulfate deposit in the dissolver and contact time of the brine solution with such impurities [calcium sulfate particles] is, therefore, maintained at a minimum to produce a brine of high purity containing less than 0.2 gram per liter of calcium sulfate when dissolving Southern Rock salt.

The brine produced has "an average saturation of 99 percent" and "The solvent flow rate of approximately 20 gallons per minute for each square foot of cross-sectional area results in completely flushing the slowly soluble impurities [calcium sulfate] from the system" (Appendix-258) (column 5, third paragraph).

ARGUMENT

I. Presumption Of Validity Of Patent Office Action

In *Hayes et al.* v. *Brenner*, 123 U.S. App. D.C. 96, 357 F.2d 287, this Court stated as follows:

> As to the issue of obviousness under 103, we have reiterated time and again that a presumption of validity accompanies the action of the Patent Office, and that a Court should not interfere with that action in the absence of new evidence carrying 'through conviction' that has not been considered by the Patent Office."

Consideration of the record in this case will demonstrate that the additional evidence does not overcome that presumption.

With respect to claim 4, the subject of plaintiff's cross-appeal, it is respectfully submitted that the basic issue before the Court, in view of the prior decisions, is whether the presumption that the decision of the Patent Office is right, reinforced by the presumption that the District Court is right, is overcome by the evidence presented; in other words, do the findings of those tribunals lack substantial support in the record. *Abbott et al.* v. *Coe*, 71 App. D.C. 195, 109 F.2d 449; *Esso Standard Oil Co.* v. *Sun Oil Co.*, 97 U.S. App. D.C. 154, 299 F.2d 37. Only if evidence in a particular case overcomes these presumptions, and shows that the finding of non-patentability is "clearly wrong", does this Court reverse. *Bullard Co.* v. *Coe*, 79 U.S. App. D.C. 369, 147 F.2d 568; *Watson* v. *Bersworth et al.*, 102 U.S. App. D.C. 187, 251 F.2d 898; *Schafer* v. *Watson*, 109 U.S. App. D.C. 360, 288 F.2d 144.

In general, this Court stated in *Reynolds* v. *Aghnides*, 123 U.S. App. D.C. 28, 356 F.2d 367 that:

> * * *"doubt [as to patentability] is to be resolved", not in favor of the applicant, but "in favor of the correctness of administrative * * * action". (Decisions cited).

2. Unpatentability Based On Courthope et al.

(a) *Basis For Unpatentability*

The plaintiff's claims (Appendix-355 to 357), in substance, are basically drawn to a 2-step continuous process for producing high purity sodium chloride brine, from a salt source containing calcium sulfate, comprising (1) passing solvent (water) at a rapid flow rate through a mass of source salt (in a dissolving chamber; thereby dissolving the sodium chloride while entraining a major or substantial portion of undissolved calcium sulfate), and (2) immediately thereafter rapidly separating the undissolved calcium sulfate from the brine.

The differences in the claims are as follows. Although claim 4, in effect, calls for an upward flow of the solvent, claims 5 and 6 are broad enough to encompass a downward or a horizontal flow. Claim 4 does not specify any flow rate, but claims 5 and 6 call for about (or at least) ten (10) gallons per minute per square foot of cross-sectional area of the flow path. While claim 4 does not specify how the separation is effected, claims 5 and 6 require centrifugal separation.

The Courthope et al. patent (Def. Ex. 1A) (Appendix-250) is for an upflow salt dissolving apparatus (all claims in the patent are to the apparatus). There are also certain principles and disclosures therein which expressly or implicitly suggest the presently claimed basic 2-step process (rapid flow rate of solvent and immediate rapid separation). The District Court recognized those disclosures in the patent in its opinion at the end of the first trial (Tr-95 to 97 of first trial) (Appendix-86 to 88). Thus, Courthope et al. state (Appendix-251) (Column 1, last full paragraph starting at line 50):

> The rate of leaching [dissolving] of the calcium sulfate in the dissolution water or brine is of course a function of the length of time of contact and of the speed of dissolution liquid flow * * *. Therefore, it follows that in order to produce a purer brine without substantial sulfate content, it is necessary to remove the feed in sulfate particles from contact with the dissolution liquid as quickly as possible when the latter is within the range of 50% to 80% saturation condition.

Plaintiff's witness readily admitted on cross-examination in the first trial that the above excerpt from the patent clearly suggests the usefulness of rapid solvent flow rate. Hence, the following exchange (Appendix-73 and 74) (question and answer bridging Tr-79 and 80 of first trial):

> Q. Does that first sentence starting at line 50 teach the art that it would be desirable to speed up the flow of solvent liquid through the rock salt bed in order to avoid or minimize solution of the calcium sulfate?
>
> A. Yes.

That express (or at least implicit) teaching to the art by Courthope et al that a rapid solvent flow rate is normally useful (because it would reduce time of contact and therefore dissolution of the calcium sulfate) is not vitiated by the discussion in the patent relating to the operation of the particular Courthope et al *apparatus* wherein it is stated that "the fresh feed water will flow slowly upwardly" (Appendix-252) (Column 4, lines 22-23). In this connection, it is also noted that the witness testified on cross-examination in the first trial that it would be an obvious expedient *to speed up production* of the sodium chloride brine by speeding up the flow of a solvent through the brine—and that *this would expectedly entrain the particles of calcium sulfate in the flowing brine* (Appendix-72) (Tr-78, of first trial).

Courthope et al. further emphasize the importance of immediate rapid separation of entrained calcium sulfate from the brine by repeating (Appendix-253) (Column 6, first full paragraph starting at line 10):

> It has also been determined that in order to produce a substantially purer brine by passing dissolution water through salt of the type including, for example, calcium sulfate in the form of anhydrite, *it is essential to remove the anhydrite particles* away from contact with the dissolution water or brine *as quickly as possible* and especially when the contact therebetween occurs under conditions wherein the brine exists at from 50% to 80% concentration. (Emphasis added).

It is implicit in that caveat that rapid separation is equally important when the brine is substantially fully saturated, a saturated brine being the prime objective in the art (e.g., Appendix-253, column 5 of Courthope et al., line 49).

The witness also testified on cross-examination in the first trial (Appendix-73) (Tr-79 of first trial) that it was known in the art that there are separators, such as the centrifugal separator, which will accomplish a quick separation of suspended solid matter in solution—and that the Laughlin et al. patent (Appendix-73) (Def. Ex. 1B) shows such a centrifugal separator. The application at bar states that the separator may be of any desired commercial type

—with specific reference to the centrifugal separator of Laughlin et al. (Appendix-232) (Page 5, bottom).

Manifestly, the basic 2-step process disclosed and claimed in the present application (rapid flow rate of solvent and immediate rapid separation) is expressly, or at least implicitly, suggested by Courthope et al. (for the same purpose of obtaining high purity brine). While Courthope et al. do not specify centrifugal separation for immediate rapid removal of calcium sulfate from the brine solution, the use of centrifugal separation for such purpose was fully within the skill of the art, especially in view of the Laughlin et al. patent (Def. Ex. 1B) (Appendix-245), the testimony of the witness (Tr-79 of first trial) (Appendix-73) and statements in the present application (Page 5) (Appendix-232).

(b) *Claims 5 and 6*

Claims 5 and 6 distinguish over the above prior art substantially *only* in specifying a flow rate of about or at least ten (10) gallons per minute per square foot of cross-sectional area of the flow path. However, there is no *factual* evidence to show that the specified flow rate has any critical significance. It is well settled law that a specified condition does not patentably distinguish over the prior art unless it has been *shown* to represent more than the location of the optimum condition and therefore indicates a difference in kind rather than degree (i.e., unless the particular condition has been *demonstrated* to possess a critical significance). *Helen Curtis Industries, Inc.* v. *Sales Affiliates, Inc.*, 233 F.2d 148 (2d Cir. 1956), citing *Kwik Set, Inc.* v. *Welch Grape Juice Co.*, 86 F.2d 945 (2d Cir. 1936). Also in point (among numerous other like decisions) are *Dow Co.* v. *Halliburton*, 324 U.S. 320 (1944), citing *Kwick Set* supra; and *In re Budde*, 50 CCPA 1491, 319 F.2d 242 (1963), citing *In re Aller*, 42 CCPA 824, 220 F.2d 454 (1955). Moreover, the witness testified that the specified flow rate could have been "ascertained by a simple test" (Appendix-162) (Tr-68 of second trial). Therefore, since the specified flow rate in claims 5 and 6 has not been *factually* demonstrated to have any critical significance, but in fact has been characterized in effect by the witness as non-critical, it cannot be relied on for patentability.

Since Courthope et al. expressly teach that "it is essential to remove the anhydrite [calcium sulfate] particles away from contact with the dissolution water or brine as quickly as possible", it would be obvious to remove the calcium sulfate "from contact with the brine before the calcium sulfate content of the brine exceeds about 1.0 grams per liter of brine" (called for by claims 5 and 6).

The noted disclosures in the prior art and testimony of the witness clearly render claims 5 and 6 (which do not require an upflow of solvent) unpatentable over the Courthope et al. patent, especially in view of the patent to Laughlin et al. (under the mandate of 35 U.S.C. 103).

(c) *Claim 4*

With respect to claim 4 (which in effect requires an upward flow of the solvent), it is significant that, in the main and in its general description of the alleged invention, the application at bar is not limited to and does not assign any particular significance to an upwardly flowing solvent (as opposed to a downwardly flowing solvent). That view of the application disclosure is substantiated by claims 5 and 6 which do not require an upward flow. Only in describing "an apparatus operable in accord with the method of the present invention" (Appendix-231) (Page 4, middle) does the application mention the "liquid upflow" provided by *that arrangement* of the apparatus (Appendix-232) (Page 5, middle). The clear implication from the present application is that those skilled in the art would know how to practice the basic 2-step process in either an unflow or a downflow manner.

Nevertheless, Courthope et al. show an upward flow in conjunction with the operation of their apparatus, the *apparatus* there being the inventive feature of the patent. It is again noted that claim 4 does not specify any flow rate, nor does that claim specify how the separation is affected. Claim 4, therefore, is also clearly unpatentable over the Courthope et al. patent (at least under 35 U.S.C. 103).

(d) *Arguments Advanced by Plaintiff*

The arguments of the plaintiff in his pre-trial brief and at the second trial, in large measure ignored the presence and substance of the last full paragraph in column 1 of the Courthope et al. patent (Appendix-251)—which, as demonstrated above, clearly suggests rapid solvent flow rate and immediate rapid separation of the calcium sulfate to produce pure brine. At most, appellee implied that said paragraph merely states "objectives". However, even if they were mere "objectives", the implementation of those "objectives" would be extraordinarily obvious.

Instead, plaintiff (and his witness) focused on the apparatus disclosed and claimed by Courthope et al. and the operation of that *apparatus*, which plaintiff implicitly argued does not *apply* the rapid flow rate and immediate rapid separation manifestly suggested to the art by the above paragraph in column 1 of the patent. In view thereof, plaintiff argued that the patent teaches away from his process and in effect urges that said paragraph amounts to an accidental or incidental disclosure which can afford no basis for refusing his claims.

However, the plaintiff has not denied (as he cannot) that the last full paragraph in column 1 of the Courthope et al. patent clearly suggests (as general procedural principles) rapid solvent flow rate (which would expectedly entrain the calcium sulfate particles) and immediate rapid separation (to further minimize dissolution of the calcium sulfate). That teaching is available to the art regardless of the particular apparatus and its operation. It is significant in this regard that Courthope et al. do not claim the operation of their apparatus, nor any other process—their claims being limited exclusively to the apparatus. Moreover, where the disclosure in a prior patent suggests the claimed subject matter, it is immaterial whether the prior disclosure is accidental or intentional. *In re Land*, 51 CCPA 781, 324 F.2d 312 (1963); *In re Pio*, 42 CCPA 746, 217 F.2d 956 (1952); *In re Seid*, 34 CCPA 1039, 161 F.2d 229 (1947); *In re Wagner*, 20 CCPA 985, 63 F.2d 987 (1933); *In re Bager, et al.*, 18 CCPA 1094, 47 F.2d 951 (1931).

Therefore, plaintiff's effort to limit the relevance of the Courthope et al. patent to its apparatus and the operation of that apparatus is without merit and unwarranted. Also, as pointed out previously, the implicit suggestion by Courthope et al., in effect, that a rapid solvent flow rate is *generally* useful or desirable is not vitiated by the relatively expressed "slowly upwardly" flow they find useful in their *particular* apparatus where the apparatus is the object of their invention.

In addition, evidence introduced by plaintiff at the second trial demonstrates that operation of the Courthope et al. apparatus in fact results in a brine that differs little, if at all, in purity from the product of appellees process. Thus, plaintiff's evidence (P. Ex. 16) (Appendix-272) indicates that the brine produced by the Courthope et al. apparatus has a purity of "99.7 to 99.8 per cent at low and moderate flow rates" (Appendix-298) (Page 315, bottom) whereas the brine produced by the claimed process herein is "99.8 to 99.9" percent pure (Appendix-299) (page 316). No real difference in purity is apparent.

The plaintiff has also argued that, in the preparation of purified brine, the prior art generally used settling or filtration methods for separating the undissolved calcium sulfate—and that this permitted longer contact and therefore more dissolution of the calcium sulfate as well as other undesirable effects. However, for the reasons already discussed herein, the use of centrifugal separation (for fast efficient separation of solids from a liquid or solution) was very well known in the art. Hence, it was an obvious expedient to substitute centrifugal separation for settling or filtration devices. Laughlin et al. point out that centrifugal separation may be substituted for settling tanks (Appendix-247) (paragraph bridging page 2).

Plaintiff has further contended that the claimed process represents a solution to a long standing problem in the art. As evidence of this, he relies principally on certain portions of a book edited by Kaufmann (P. Ex. 16) (Appendix-272) and six prior art patents abstracted in the Kaufmann book (P. Ex. 17) (Appendix-300 to 325). The patents discussed in the Kaufmann book cover a period from 1897 to 1956. Those patents merely manifest the modifications and changes that normally occur in the long term development of an art. Neither the patents nor the discussion in the Kaufmann book amount to substantial *factual* evidence of any significant long standing problem in the art. In this regard, it is again noted that, according to the Kaufmann book (Appendix-292) (P. Ex. 16, page 315, bottom), the apparatus of the Courthope et al. reference patent (1956) produces brine purity of "99.7 to 99.8 per cent at low and moderate flow rates".

The Kaufmann book (P. Ex. 16) discusses "fundamental defects" of upflow (Appendix-283 and 284) (pages 285, 286) and downflow (Appendix-284 and 285) (pages 286, 287) dissolvers. Regarding claim 4 at bar (limited to upflow), there is no *factual* evidence that the claimed process does not exhibit all or most of the fundamental defects of upflow dissolvers. As for claims 5 and 6 at bar (which do not require upflow), there is also no *factual* evidence that the claimed process does not exhibit all or most of the fundamental defects of *both* types of dissolvers. In point of fact, the Kaufmann text mentions some considerable "drawbacks" to the *claimed* process when employed with an upflow dissolver (Appendix-299) (P. Ex. 16, page 316).

In Graham et al. v. *John Deere Co., et al.*, 383 U.S. 1 (1966), the Supreme Court indicated that, in assessing obviousness under 35 U.S.C. 103, "long felt but unsolved needs, failure of others, etc." should be considered. In accord therewith, it is settled law that an allegation of an unsolved problem in the art "is not evidence of unobviousness unless it is shown, *as was not done here* [emphasis added], that the widespread efforts of skilled workers having knowledge of the prior art had failed to find a solution to the problem"; *In re Allen*, 51 CCPA 809; 324 F.2d 993 (1963), citing *Toledo Pressed Steel Co.* v. *Standard Parts, Inc.*, 307 U.S. 350, 356 (1939). Other decisions to the same effect are *Swenson* v. *Watson*, 100 U.S. App. D.C. 44, 241 F.2d 449 (1957); *Lindberg Engineering Co.* v. *Ajax Engineering Corp.*, 199 F. 2d 807 (7 Cir. 1952); and *Allen* v. *Standard Crankshaft and Hydraulic Co.*, 323 F.2d 29 (1963). The evidence in this case is insufficient to meet the test of a long standing problem in the art—or to show that the plaintiff provided a solution to the problem, if it existed.

3. Unpatentability Based On Miller

(a) *Miller Reference Was Considered By The District Court*

The District Court received in evidence both the Miller patent (P. Ex. 4) (Appendix-255) and the abandoned Miller parent application Serial No. 426,739 referred to in the patent (Def. Ex. 2) (Appendix-368). At the first trial, the District Court indicated that the Miller patent was unnecessary to sustain the position of the Patent Office and therefore decided "to exclude" it from further consideration (Appendix-74) (Tr-80 of first trial). There was a discussion, at the opening of the second trial, concerning the Miller reference between the District Court and counsel for defendant below (Appendix-117 to 119) (Tr-21 and next two pages of second trial). Near the conclusion of the second trial, the District Court stated (Appendix-197 and 198) (Tr-106 and 107 of second trial):

> Well, I am not going to consider the Miller patent because it is debatable whether the Miller patent is prior art or not.

The last sentence in Finding of Fact 7 (signed Jan. 8, 1969, after the second trial) (Appendix-216) reads:

> The patent to Miller relied upon by the defendant shows rapid downward flow.

It is evident that the Miller patent and its abandoned parent application are in evidence and were in fact considered by the District Court.

(b) *Effective Filing Date of Prior Art Miller Patent*

Since the Miller patent has a filing date of Dec. 27, 1957, which antedates the filing date Feb. 11, 1963, of application Serial No. 261,929 at bar, the patent is available prior art under 35 USC 102(e). Moreover, the *effective filing date* of the Miller patent is the filing date (April 30, 1954) of the Miller abandoned parent application Serial No. 426,739 (referred to in the patent in the second paragraph of column 1) as to all common subject matter. *Goodyear Tire and Rubber Co. et al.* v. *Ladd*, 121 U.S. App. D.C. 275 (1965), citing *Asseff* v. *Marzall*, 88 U.S. App. D.C. 358, 189 F.2d 660 (1951); *In re Lund*, 54 CCPA 1361, 376 F.2d 982 (1967); *In re Heritage*, 37 CCPA 1109, 182 F.2d 639 (1950); *In re Switzer*, 35 CCPA 1013, 166 F.2d 827 (1948).

As will be shown, ~~appellee~~ plaintiff is *not* entitled to the filing dates of the two earlier abandoned Kaufmann applications (P. Ex. 18 and 19) (Appendix-326 and 341) filed on Aug. 6, 1958 and Dec. 3, 1956. Hence, the Miller patent alone would be sufficient. Nevertheless, if ~~appellee~~ plaintiff *were* entitled to the filing date of his earliest application, the claims at bar are unpatentable over the common subject matter in both the Miller patent and its parent application—and the filing date of the latter antedates the earliest Kaufmann application. The Miller patent is clearly prior art.

(c) *Basis For Unpatentability Over Common Subject Matter In Miller Patent And Its Abandoned Parent Application*

The application and claims at bar, as previously noted, are directed to the 2-step process for producing high purity brine from a salt source containing calcium sulfate comprising (1) rapid solvent flow rate (to dissolve the sodium chloride and entrain all or most of the calcium sulfate) and (2) immediate rapid separation of the calcium sulfate from the brine. It is precisely *that process* which is disclosed by Miller, albeit in a down flow process. Thus, the Miller patent (Appendix-255) (P. Ex. 6) states that (1) the solvent is passed through the bed of salt crystals at "very high solution velocities"

> whereby the calcium sulfate particles are "carried completely through the salt bed [entrained in the brine] before their separation from the brine solution" and "contact time * * * is maintained at a minimum to produce a brine of high purity containing less than 0.2 gram per liter calcium sulfate" (Appendix-256) (Column 1, last full paragraph)

and (2) there should be an immediate rapid separation since

> "The rapid flow of the solvent over the surface of the rock salt crystals effectively flushes from the salt bed the slowly soluble calcium sulfate particles, thereby making possible their immediate separation from the brine * * *" (Appendix-257) (Column 3, last paragraph).

The Miller patent discloses as effective a "solvent flow rate of approximately 20 gallons per minute for each square foot of cross sectional area" and that in commercial operation "an average saturation of 99 percent and containing less than 0.2 grams per liter of calcium sulfate in solution" is obtained (Appendix-

258) (column 5, third paragraph). Miller emphasizes the importance of immediate rapid separation by repeating in the specification that "separation is immediately effected" (Appendix-257) (column 4, line 27) and by calling for separating the brine from the solid impurities (calcium sulfate) therein "before substantial dissolution of such impurities in the brine" in method claims 5 to 11 (Appendix-258) (Column 6).

The Miller abandoned parent application Serial No. 426,739 (Def. Ex. 2) (Appendix-368) discloses the same 2-step process of rapid solvent flow rate and immediate rapid separation. Thus, the parent application states that (1) the solvent is passed through the bed of salt crystals at "very high solution velocities"

> whereby the calcium sulfate particles are "carried completely through the salt bed [entrained in the brine] before their separation from the brine solution" and "contact time * * * is maintained at a minimum to produce a brine of high purity containing less than 0.2 G. P. L. calcium sulfate" (Appendix-370) (Page 2, last full paragraph)

and (2) there is an immediate rapid separation since

> "the length of time which the impurities are in contact with the solvent is maintained at a minimum, or that is, for a time period insufficient to cause more than a slight dissolution of the impurities" (Appendix-370) (page 2, first full paragraph, last sentence) and "the relative dissolution rate of the salt and impurities [calcium sulfate] is taken into account in the control of the solv-

> ent's velocity across a salt bed to the end that the impurities are maintained in a substantially undissolved state so that the same may be separated from the raw brine solution in substantially particle form and with a minimum amount of such impurities going into solution * * *" (Appendix-371) (Page 3, third full paragraph).

The Miller parent application discloses as an effective or preferred flow rate 4 gallons per minute for a *6 inch diameter* flow path (Appendix-374) (page 6, first sentence of full paragraph); in an amendment to that specification (Appendix-379 and 380) (last 2 pages of Def. Ex. 2), it was pointed out (as may be calculated) that said flow rate is equivalent to "approximate 20 gallons per minute per square foot of cross-sectional area". Contrary to plaintiff's contention (Br-37), that *calculated* equivalent flow rate is clearly not "new matter". The parent application also states that "an average saturation of 99% is obtained" (Appendix-374) (page 6, middle). That application also further emphasizes the importance of immediate rapid separation by calling for separating the brine from the undissolved calcium sulfate particles "before the latter go into solution in the brine" in process claims 3 to 5 (Appendix-377).

It is evident from the foregoing analysis that the relevant disclosures concerning the claimed 2-step process are found in *both* the Miller patent and its prior abandoned parent application. The effective or preferred flow rate of 20 gallons per minute per square foot of cross-sectional area disclosed by Miller corresponds to the flow rate specified in claims 5 and 6; this is apparent from the testimony that the expression "extremely rapid flow", used in the Kaufmann book to describe the claimed process (Appendix-299) (P. Ex. 16, page 316, top), means

> Ten to twelve to twenty gallons per minute per square foot (Appendix-139) (Tr-45, bottom, of the second trial).

Since only process claims are in issue, the particular apparatus or separation devices employed by Miller are irrelevant. Since Miller stresses immediate rapid separation, it is also irrelevant to the presently claimed process that he does not employ immediate *centrifugal* separation (not required by claim 4). Apparently, however, the initial settling tank separation employed by Miller is highly effective since he produces "a brine of high purity containing less than 0.2 gram per liter calcium sulfate" (this may be compared with appellee's product which contains "about 0.8 to about 1.0 grams per liter" of dissolved calcium sulfate in the saturated brine—Appendix-228, application at bar, page 1). Nonetheless, for the reasons discussed above in connection with the rejection on Courthope et al., the use of rapid centrifugal separation was well within the ordinary skill of the art (as evidenced by the Laughlin et al. patent, the testimony and the present disclosure). Therefore, claims 5 and 6 at bar (which do not require solvent upflow) are clearly unpatentable over the Miller reference, especially in view of the Laughlin et al. patent (under the mandate of 35 U.S.C. 103).

(d) *Miller Reference and Upflow*

Claim 4 (which does not require centrifugal separation) distinguishes over the Miller reference substantially only in that it provides for upward flow of the solvent. That, however, does not amount to a patentable distinction. The record is replete with evidence that upflow and downflow dissolvers and procedures were old in the art; e.g., that is demonstrated by the Kaufmann book (P. Ex. 16) (Appendix-272); of course, Courthope et al. disclose an upflow dissolver apparatus in their patent.

Inasmuch as upflow dissolving and downflow dissolving were well known procedures in the prior art (Br-21, bottom), it would be wholly obvious and lack patentable invention to practice the Miller 2-step process by upflow rather than downflow of the solvent. Although only process claims are in issue, it may be noted that modifications of the apparatus for upflow (if that were desired) would clearly lie within the ordinary skill of the art.

Also, as previously indicated, the present application in its general description of the 2-step process does not distinguish between upflow or downflow. It is only in describing "an apparatus operable in accord with the present invention" (Appendix-231) (page 4, Middle) that reference is made to the "liquid upflow" provided by *that arrangement* of the apparatus. Manifestly, the emphasis in plaintiff's application is not on upflow (or downflow) but rather the 2-step process of rapid solvent flow and immediate rapid separation. The clear implication from plaintiff's disclosure is that the alleged invention is in the 2-step process—and that it is illustrated by an upflow apparatus. As noted earlier, it is also implicit in the present application that those skilled in the art could adapt the disclosed process for upflow or downflow operation. Moreover, it is also obvious from the prior art of record that the process may be practiced either in an upflow or a downflow manner—with the inherent known disadvantages and advantages of each. Therefore, claim 4 at bar is clearly unpatentable over the Miller reference, especially in view of Courthope et al. who show that upflow procedures were known in the art (under 35 U.S.C. 103).

(e) *Effective Filing Date of Application at Bar*

The plaintiff apparently relies upon the two earlier abandoned Kaufmann applications (P. Ex. 18 and 19) (Appendix-326 and 341) to antedate the Miller *patent*. The emphasis in each of those earlier abandoned applications is on immediate rapid separation rather than on rapid flow of solvent. More importantly, those applications do *not* disclose or recite a specific rate of solvent flow. It is apparent that plaintiff's counsel had this deficiency in mind in the following exchange on direct examination (Appendix-162) (Tr-68 of the second trial):

> Q. Can that [flow rate to entrain calcium sulfate] be ascertained by a simple test without regard to the statement of Kaufmann [*only* in the application at bar] about ten gallons a minute?
> A. Yes.

However, "There is a critical difference * * * between a disclosure which is sufficient to support the rejection of a claim * * * and a disclosure which is sufficient to support the allowance of a claim * * *"; *In re Stoll et al.*, 34 CCPA 1058, 161 F.2d 241 (1947).

Also, 35 U.S.C. 112 requires a "full, clear, concise and exact" disclosure sufficient for a person skilled in the art as well as "the best mode contemplated by the inventor of carrying out his invention". Therefore, the absence of a specific operable flow rate in the abandoned Kaufmann applications is not only a significant difference from the disclosure in the application at bar, but also amounts to an inadequate disclosure not sufficient to satisfy the requirements of Section 112. Plaintiff's reference to the alleged work of James Eads (Br-28) is not in evidence and therefore entitled to no consideration.

The statutory requirement in 35 U.S.C. 120 provides that an application is entitled to an earlier filing date only when the invention is disclosed as required by Section 112 in the earlier application. Hence, the application at bar cannot benefit, in the present circumstances, from the filing date of either of the earlier Kaufmann applications.

Nevertheless, as previously pointed out, if the filing dates of the earlier Kaufmann applications could inure to the benefit of the application at bar, the effective filing date of Miller (which is that of the Miller abandoned parent application for the common subject matter) antedates the earliest Kaufmann application.

4. Claimed Process Is A Mere Combination Of Old Elements

(a) *Plaintiff Has Conceded That Claims Represent A Combination Of Old Elements*

The District Court, in the Opinion at the conclusion of the second trial, recognized that the disclosure and claims at bar at best represent no more than a combination of old elements (steps). Thus, the District Court stated (Appendix-204) (Opinion at second trial, page 3, second paragraph):

> The process consists of passing a stream of water through the brine liquid, doing so in an upward direction and doing so at a very rapid rate. The idea of an upward flow for this purpose is known in the prior art. So too the idea of a rapid flow and slow flow was known in the prior art. What the inventor did was to put the two elements together, realizing their importance, and making a single process out of them.

The preceding discussions herein of the prior art demonstrate that the elements (steps) of the claimed process are indeed taught by the prior art. Even more, it has been demonstrated that the *combination* of the claimed 2-step process (rapid solvent flow *and* immediate rapid separation) is expressly or at least implicitly suggested by Courthope et al., and is expressly disclosed by Miller. As for the element of upward flow, the District Court overlooked the fact that claims 5 and 6 do *not* require an upward flow—which nonetheless has been shown to be well known in the art. As for the element of centrifugal separation (not required by claim 4), the evidence amply demonstrates that this was a well known expedient for the purpose of efficient rapid separation of solids from solutions.

The plaintiff has conceded through counsel, in so many words, that the claimed process is a combination of old elements. Thus, he stated as follows in final argument (Appendix-187) (Tr-96, middle, of second trial):

> The elements used in steps of our process are individually old * * *

He added that "putting them together the way they were put together by Kaufmann was unobvious". It has been amply demonstrated that "putting them together" was not unobvious.

The District Court, however, acknowledging prior holdings by the Supreme Court that a mere combination of old elements does not constitute a patentable contribution, properly held claim 4 unpatentable (Appendix-204 to 206) (Opinion at second trial, pages 3 to 5). Although claims 5 and 6 amount to no more than a similar unpatentable combination of old elements, the District Court considered them patentable because they "specify the rate of rapid flow which the inventor considers his invention" (Appendix-206) (Opinion at second trial, page 5, first full paragraph). (Prior portions of this brief have shown that the specified flow rate in claims 5 and 6 have not been *factually* demonstrated to have any critical significance; the witness in effect characterized the flow rate as non-critical; and Miller in fact discloses a comparable flow rate).

(b) *A Mere Combination Of Old Elements or Steps Is Not Patentable*

In *Great Atlantic and Pacific Tea Company* v. *Supermarket Equipment Corporation*, 340 U.S. 147 (1950), the Supreme Court admonished the courts to "scrutinize combination patent claims with a care proportioned to the difficulty and improbability in finding invention in an assembly of old elements". It then stated an essential test for the patentability of such combinations, namely, that the old elements of a combination must perform an "additional or different function in the combination than they perform out of it". The Court also stated:

> "The conjunction or concert of known elements must contribute something; only when the whole in some way exceeds the sum of its parts is the accumulation of old devices [elements] patentable".

The test stated in the *A and P* case was not new; *Hailes* v. *Van Warmer*, 87 U.S. 353, 368 (1874); *Reckendorfer* v. *Faber*, 92 U.S. 347, 359 (1876); *Carbice Corp. of America* v. *American Patents Development Co. et al.*, 283 U.S. 420 (1931); *In re Smith*, 34 CCPA 1007, 1012, 161 F.2d 274, 278 (1947). In *Smith* the Court of Customs and Patent Appeals stated:

> The old elements all perform the same functions in the new combination that they performed in the prior art; there is no new or unexpected coaction between them, and the results obtained can hardly be said to be those which are unobvious or unexpected.

However, the strong directives to the courts in the *A and P* case were novel, and have been closely heeded in subsequent decisions such as *Kwickset Locks, Inc.* v. *Hillgren*, 210 F.2d 483, 486 (9th Cir. 1954). The *A and P* case and *Kwickset Locks* were cited and followed in *Consolidated Trimming Corp.* v. *Loudon*, 99 U.S. App. D.C. 213, 216, 239 F.2d 33, 36 (1956). In the latter case, this Court criticized the Board of

Appeals and the District Court for allowing a claim without a showing or finding that the old elements of the claim "perform any additional or different function in the combination than they perform out of it". The Court further stated in the *Consolidated* case:

> "A mere advance in efficiency or utility is not enough to convert a non-inventive aggregation into a patentable combination" (citing *Kwickset Locks*).

There are also a number of subsequent decisions by the Court of Customs and Patent Appeals that a mere combination of old elements does not make for patentable subject matter. Typical are *In re Lindberg*, 39 CCPA 866, 194 F.2d 732 (1952); and *In re Conti*, 52 CCPA 817, 337 F.2d 664 (1964), and decisions cited therein.

The principal of law applicable to the combination of old elements is manifestly applicable whether the old elements are mechanical elements or process steps. Hence, the same principle was applied by this Court to the steps of method claims in *American Steel & Wire Co.* v. *Coe*, 70 App. D.C. 138, 105 F.2d 17 (1939). In that case, the appellant urged that the use of five steps "in combination and in sequence constitutes a new process, which makes for convenience and a great reduction in expense". The Court held that "there was no invention" because the claimed method amounted to no "more than a rearrangement or new combination" of old steps and the fact that "the new combination accomplishes a better result is not enough to evidence invention" since it required no more than ordinary skill for its accomplishment. The Court of Customs and Patent Appeals, in *In re Beaune*, 53 CCPA 1395, 363 F.2d 893 (1966), found that each of the steps in the claimed process was suggested by the prior art and therefore held that "it was incumbent upon appellants to establish through *factual* [emphasis added] proofs, the alleged valuable results made possible by the claimed invention".

(c) *There Is No Evidence Or Finding of Unobviousness Or Unexpected Result*

It is apparent that the elements or steps of the claimed process (which are clearly suggested or taught by the prior art—and largely *in combination*) perform no additional or different function in the combination than they would perform out of it. There certainly is no allegation or evidence of any new or unexpected coaction. *It is extraordinarily noteworthy* that the *District Court has made no finding of unobviousness or unexpected result.*

The absence of a finding below of unobviousness or unexpected result is understandable. Such a finding would not be supported by any factual evidence; it would in fact not accord with the evidence. The principal stated objectives in the application at bar are more rapid production of brine containing no more than about 0.8 to 1.0 gram per liter of calcium sulfate. Speedy operation is obviously inherent in and clearly suggested or taught by the prior art. The Kaufmann book (Appendix-298 and 299) (P. Ex. 16, pages 315-316) indicates that the Courthope et al. operation gives brine purity of 99.7 to 99.8 percent while the claimed process affords brine purity of 99.8 to 99.9 percent; the Miller process results in a brine containing less than 0.2 gram per liter of calcium sulfate. Manifestly, unobviousness or unexpected results are incapable of being shown.

The facts and evidence of the case demonstrate that the claimed process is directed to no more than a *mere* combination of old elements or steps. There is no evidence or finding of unobviousness or of any unexpected result. Hence, under the authorities cited above, claims 4, 5 and 6 are unpatentable over the prior art.

5. Further Consideration of Arguments In Plaintiff's Brief

Referring to the saying "Don't do as I do, do as I say," the plaintiff asserts that this "applies to the three prior art patents on which defendant has relied" (Br-15). Of course, the defendant relies only on Courthope et al. or Miller as alternative principal prior art references; Laughlin et al. is relied on to show that centrifugally separating was well known in the art. Nevertheless, the plaintiff's assertion amounts to a concession that the claimed 2-step process is at least implicitly suggested or expressly disclosed by Courthope et al. and Miller. That is sufficient to render the claimed process unpatentable under the law.

The plaintiff states that "The invention required only three main components," i.e., a dissolving chamber, a brine pump and a centrifugal separator (Br-23). Apart from plaintiff's admission that these components "were old and well known" (Br-23), he loses sight of the fact that the claims at bar are drawn to the process and not to apparatus. Moreover, in addition to the obviousness of employing a pump to expedite fast delivery of a fluid material, the claims do not recite or require a pump. Patentability is determined by what has been claimed, not by what might have been claimed. *In re Soderquist*, 51 CCPA 969, 326 F.2d 1016; *In re Boice*, 51 CCPA 975, 326 F.2d 1014; *In re Lindberg*, 39 CCPA 866, 194 F.2d 732.

As he had done below, the plaintiff's contentions in his brief vis-a-vis Courthope et al. and Miller emphasize the *apparatus* disclosed in those prior art patents and the operation of that apparatus (Br-15 to 19 and 20, 21). The disclosures in those reference patents relied on by defendant have been fully discussed above; those disclosures and teachings to the art are not diminished by the particular apparatus and their operation also disclosed in the patents.

Plaintiff's reliance on *Higley* v. *Brenner* (Br-31, 32) is misplaced since that case is readily distinguished on its facts. Unlike the factual situation in the case at bar, the result achieved in *Higley* was "strikingly new" and "Detailed testimony [in *Higley*]illustrated beyond question that the device satisfied a long felt need and that it had become a commercial success." The *Higley* decision further pointed out that the secondary factors of commercial success and satisfaction of a long felt need "will not avail if the subject matter is clearly obvious," citing

Graham et al. v. *John Deere Company et al.*, supra. The preceding portions of this brief have demonstrated that the claimed process was clearly obvious from the prior art. The various other decisions cited in the plaintiff's brief are irrelevant or readily distinguished their facts—and are therefore not controlling or persuasive.

As pointed out and for the reasons previously set forth in this brief, the claimed process is a combination of old elements or steps—and there is essentially no allegation, and no evidence or finding, of any new or unexpected result. Hence, plaintiff's discussion of 35 USC 100(b), in regard to "a new use of a known process" or "machine" (Br-36, 37) is entirely irrelevant.

6. Dismissal Of Complaint As To Claim 4 "Without Prejudice"

Although the complaint below was properly dismissed by the District Court as to claim 4, it was improper and unwarranted to do so "without prejudice" (Appendix-220).

In *Weeks et al.* v. *Warp et al.*, 95 U.S. App. D.C. 235, 221 F.2d 108 (1955), this Court held certain claims (previously adjudicated in the Court of Customs and Patent Appeals) unpatentable under the doctrine of *res adjudicata*, citing prior decisions of the Court. By contrast, the District Court has in the past (in non-reported cases) held that *res adjudicata* was *not* applicable where the complaint was dismissed without prejudice. However, as the Court of Customs and Patent Appeals stated in *Anderson* v. *Scinta*, 54

CCPA 1269, 372 F.2d 523 (1967), "In the Patent Office as elsewhere there must be an end to litigation".

The application at bar is described in its oath (Appendix-242) as a continuation-in-part of prior abandoned application Serial No. 753,516 (P. Ex. 18) (Appendix-326). The latter application states in its oath (Appendix-338) that it is on a continuation-in-part of the still earlier abandoned application Serial No. 625,899 (Appendix-341) (P. Ex. 19). There is apparently at least one other application on the same subject matter now pending in the Patent Office.

In his pre-trial brief before the second trial, plaintiff's attorney requested dismissal "without prejudice" for the purpose of allowing subsequent amendment in the Patent Office and "to preserve plaintiff's rights in the subject matter thereof". In his opening statement and final argument (Appendix-108 and 179) (Tr-8, 86 of second trial) plaintiff's counsel requested dismissal of claim 4 "without prejudice" so that appellee "can go back" to the Patent Office.

The District Court correctly held that claim 4 was merely drawn to a combination of old elements or steps and therefore, under the law, unpatentable. If this Court sustains the District Court's decision that claim 4 is unpatentable, that should put an end to the matter. The plaintiff should not be permitted to "go back" to the Patent Office on claim 4 and start again another chain of litigation on the same subject matter. As stated in *Anderson* v. *Scinta*, supra, "In the Patent Office as elsewhere there must be an end to litigation".

Therefore, it is respectfully submitted that the judgment below dismissing the complaint as to claim 4 should be affirmed, but this Court should direct that the complaint as to claim 4, as well as to claims 5 and 6, be dismissed with prejudice. In the alternative, it is submitted that this Court should in effect direct that the complaint as to claims 4, 5 and 6 be dismissed—it being understood that the dismissal is with prejudice.

CONCLUSION

It is respectfully submitted that the District Court erred as a matter of law in concluding that the plaintiff is entitled to receive a patent containing claims 5 and 6 since these claims are unpatentable over the prior art; and that although the District Court properly dismissed the complaint as to claim 4, it erred as a matter of law in doing so "without prejudice".

Respectfully submitted,

S. WM. COCHRAN, *Acting Solicitor*
United States Patent Office

JACK E. ARMORE,
Of Counsel

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